

DATE: 08/02/2004

IFWO

```
PATENT APPLICATION: US/10/812,737
                                                              TIME: 11:25:10
                     Input Set : A:\PTO.LM.TXT
                     Output Set: N:\CRF4\08022004\J812737.raw
      3 <110> APPLICANT: ChondroGene
              Liew, Choong-Chin
      6 <120> TITLE OF INVENTION: Method for the Detection of Gene Transcripts in Blood and
Uses
              Thereof
      9 <130> FILE REFERENCE: xx
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/812,737
C--> 11 <141> CURRENT FILING DATE: 2004-03-30
     11 <150> PRIOR APPLICATION NUMBER: US
     12 <151> PRIOR FILING DATE: 2000-01-04
    14 <150> PRIOR APPLICATION NUMBER: US 60/115,125
    15 <151> PRIOR FILING DATE: 1999-01-06
    17 <160> NUMBER OF SEQ ID NOS: 112
    19 <170> SOFTWARE: PatentIn version 3.2
    21 <210> SEQ ID NO: 1
    22 <211> LENGTH: 110
    23 <212> TYPE: DNA
    24 <213> ORGANISM: Human
    26 <400> SEQUENCE: 1
    27 acacaacgta acaataacat atttagccaa tgtagtagac tgctatataa tacattagag
    29 tgtcaattca ttccgtttac agccccattq qqtqtcaaat tttttttqtt
                                                                              110
    32 <210> SEQ ID NO: 2
    33 <211> LENGTH: 530
    34 <212> TYPE: DNA
    35 <213> ORGANISM: Human
    38 <220> FEATURE:
    39 <221> NAME/KEY: misc_feature
    40 <222> LOCATION: (16)..(16)
    41 <223> OTHER INFORMATION: n is a, c, g, or t
    43 <220> FEATURE:
    44 <221> NAME/KEY: misc feature
    45 <222> LOCATION: (19)..(19)
    46 <223> OTHER INFORMATION: n is a, c, g, or t
    48 <220> FEATURE:
    49 <221> NAME/KEY: misc feature
    50 <222> LOCATION: (25)..(25)
    51 <223> OTHER INFORMATION: n is a, c, g, or t
    53 <220> FEATURE:
    54 <221> NAME/KEY: misc feature
    55 <222> LOCATION: (38)..(38)
    56 <223> OTHER INFORMATION: n is a, c, g, or t
    58 <220> FEATURE:
    59 <221> NAME/KEY: misc feature
```

RAW SEQUENCE LISTING

60 <222> LOCATION: (40)..(40)

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/812,737

DATE: 08/02/2004 TIME: 11:25:10

Input Set : A:\PTO.LM.TXT

Output Set: N:\CRF4\08022004\J812737.raw

61 <223> OTHER INFORMATION: n is a, c, g, or t 63 <220> FEATURE: 64 <221> NAME/KEY: misc feature 65 <222> LOCATION: (42)..(42) 66 <223> OTHER INFORMATION: n is a, c, g, or t 68 <220> FEATURE: 69 <221> NAME/KEY: misc_feature 70 <222> LOCATION: (44)..(44) 71 <223> OTHER INFORMATION: n is a, c, g, or t 73 <220> FEATURE: 74 <221> NAME/KEY: misc feature 75 <222> LOCATION: (64)..(66) 76 <223> OTHER INFORMATION: n is a, c, g, or t 78 <220> FEATURE: 79 <221> NAME/KEY: misc feature 80 <222> LOCATION: (70)..(71) 81 <223> OTHER INFORMATION: n is a, c, g, or t 83 <220> FEATURE: 84 <221> NAME/KEY: misc feature 85 <222> LOCATION: (81)..(81) 86 <223> OTHER INFORMATION: n is a, c, g, or t 88 <220> FEATURE: 89 <221> NAME/KEY: misc feature 90 <222> LOCATION: (86)..(86) 91 <223> OTHER INFORMATION: n is a, c, g, or t 93 <220> FEATURE: 94 <221> NAME/KEY: misc_feature 95 <222> LOCATION: (89)..(89) 96 <223> OTHER INFORMATION: n is a, c, g, or t 98 <220> FEATURE: 99 <221> NAME/KEY: misc feature 100 <222> LOCATION: (117)..(117) 101 <223> OTHER INFORMATION: n is a, c, g, or t 103 <220> FEATURE: 104 <221> NAME/KEY: misc feature 105 <222> LOCATION: (121)..(121) 106 <223> OTHER INFORMATION: n is a, c, q, or t 108 <220> FEATURE: 109 <221> NAME/KEY: misc feature 110 <222> LOCATION: (123)..(123) 111 <223> OTHER INFORMATION: n is a, c, g, or t 113 <220> FEATURE: 114 <221> NAME/KEY: misc_feature 115 <222> LOCATION: (135)..(135) 116 <223> OTHER INFORMATION: n is a, c, g, or t

118 <220> FEATURE:

119 <221> NAME/KEY: misc_feature 120 <222> LOCATION: (143)..(143)

121 <223> OTHER INFORMATION: n is a, c, g, or t

RAW SEQUENCE LISTING DATE: 08/02/2004 PATENT APPLICATION: US/10/812,737 TIME: 11:25:10

Input Set : A:\PTO.LM.TXT

Output Set: N:\CRF4\08022004\J812737.raw

123 <220> FEATURE: 124 <221> NAME/KEY: misc feature 125 <222> LOCATION: (177)..(177) 126 <223> OTHER INFORMATION: n is a, c, g, or t 128 <220> FEATURE: 129 <221> NAME/KEY: misc feature 130 <222> LOCATION: (179)..(179) 131 <223> OTHER INFORMATION: n is a, c, g, or t 133 <220> FEATURE: 134 <221> NAME/KEY: misc_feature 135 <222> LOCATION: (181)..(181) 136 <223> OTHER INFORMATION: n is a, c, g, or t 138 <220> FEATURE: 139 <221> NAME/KEY: misc feature 140 <222> LOCATION: (193)..(194) 141 <223> OTHER INFORMATION: n is a, c, g, or t 143 <220> FEATURE: 144 <221> NAME/KEY: misc_feature 145 <222> LOCATION: (209)..(210) 146 <223> OTHER INFORMATION: n is a, c, g, or t 148 <220> FEATURE: 149 <221> NAME/KEY: misc feature 150 <222> LOCATION: (215)..(215) 151 <223> OTHER INFORMATION: n is a, c, g, or t 153 <220> FEATURE: 154 <221> NAME/KEY: misc feature 155 <222> LOCATION: (217)..(217) 156 <223> OTHER INFORMATION: n is a, c, g, or t 158 <220> FEATURE: 159 <221> NAME/KEY: misc feature 160 <222> LOCATION: (221)..(221) 161 <223> OTHER INFORMATION: n is a, c, g, or t 163 <220> FEATURE: 164 <221> NAME/KEY: misc feature 165 <222> LOCATION: (228)..(228) 166 <223> OTHER INFORMATION: n is a, c, g, or t 168 <220> FEATURE: 169 <221> NAME/KEY: misc feature 170 <222> LOCATION: (233)..(233) 171 <223> OTHER INFORMATION: n is a, c, g, or t 173 <220> FEATURE: 174 <221> NAME/KEY: misc feature 175 <222> LOCATION: (236)..(236) 176 <223> OTHER INFORMATION: n is a, c, g, or t 178 <220> FEATURE: 179 <221> NAME/KEY: misc feature

183 <220> FEATURE:

180 <222> LOCATION: (243)..(243)

181 <223> OTHER INFORMATION: n is a, c, g, or t

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/812,737

DATE: 08/02/2004 TIME: 11:25:10

Input Set : A:\PTO.LM.TXT

- 184 <221> NAME/KEY: misc_feature
- 185 <222> LOCATION: (251)..(254)
- 186 <223> OTHER INFORMATION: n is a, c, g, or t
- 188 <220> FEATURE:
- 189 <221> NAME/KEY: misc_feature
- 190 <222> LOCATION: (270)..(270)
- 191 <223> OTHER INFORMATION: n is a, c, g, or t
- 193 <220> FEATURE:
- 194 <221> NAME/KEY: misc feature
- 195 <222> LOCATION: (272)..(272)
- 196 <223> OTHER INFORMATION: n is a, c, g, or t
- 198 <220> FEATURE:
- 199 <221> NAME/KEY: misc_feature
- 200 <222> LOCATION: (274)..(275)
- 201 <223> OTHER INFORMATION: n is a, c, g, or t
- 203 <220> FEATURE:
- 204 <221> NAME/KEY: misc feature
- 205 <222> LOCATION: (283)..(283)
- 206 <223> OTHER INFORMATION: n is a, c, g, or t
- 208 <220> FEATURE:
- 209 <221> NAME/KEY: misc feature
- 210 <222> LOCATION: (292)..(293)
- 211 <223> OTHER INFORMATION: n is a, c, g, or t
- 213 <220> FEATURE:
- 214 <221> NAME/KEY: misc_feature
- 215 <222> LOCATION: (299)..(299)
- 216 <223> OTHER INFORMATION: n is a, c, q, or t
- 218 <220> FEATURE:
- 219 <221> NAME/KEY: misc_feature
- 220 <222> LOCATION: (303)..(303)
- 221 <223> OTHER INFORMATION: n is a, c, g, or t
- 223 <220> FEATURE:
- 224 <221> NAME/KEY: misc_feature
- 225 <222> LOCATION: (307)..(307)
- 226 <223> OTHER INFORMATION: n is a, c, g, or t
- 228 <220> FEATURE:
- 229 <221> NAME/KEY: misc feature
- 230 <222> LOCATION: (312)..(312)
- 231 <223> OTHER INFORMATION: n is a, c, g, or t
- 233 <220> FEATURE:
- 234 <221> NAME/KEY: misc_feature
- 235 <222> LOCATION: (319)..(319)
- 236 <223> OTHER INFORMATION: n is a, c, g, or t
- 238 <220> FEATURE:
- 239 <221> NAME/KEY: misc_feature
- 240 <222> LOCATION: (324)..(325)
- 241 <223> OTHER INFORMATION: n is a, c, g, or t
- 243 <220> FEATURE:
- 244 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING

DATE: 08/02/2004 TIME: 11:25:10

PATENT APPLICATION: US/10/812,737

Input Set : A:\PTO.LM.TXT

, ,

- 245 <222> LOCATION: (328)..(329)
- 246 <223> OTHER INFORMATION: n is a, c, q, or t
- 248 <220> FEATURE:
- 249 <221> NAME/KEY: misc feature
- 250 <222> LOCATION: (342)..(342)
- 251 <223> OTHER INFORMATION: n is a, c, g, or t
- 253 <220> FEATURE:
- 254 <221> NAME/KEY: misc_feature
- 255 <222> LOCATION: (345)..(345)
- 256 <223> OTHER INFORMATION: n is a, c, q, or t
- 258 <220> FEATURE:
- 259 <221> NAME/KEY: misc feature
- 260 <222> LOCATION: (366)..(366)
- 261 <223> OTHER INFORMATION: n is a, c, g, or t
- 263 <220> FEATURE:
- 264 <221> NAME/KEY: misc feature
- 265 <222> LOCATION: (377)..(377)
- 266 <223> OTHER INFORMATION: n is a, c, g, or t
- 268 <220> FEATURE:
- 269 <221> NAME/KEY: misc_feature
- 270 <222> LOCATION: (382)..(382)
- 271 <223> OTHER INFORMATION: n is a, c, g, or t
- 273 <220> FEATURE:
- 274 <221> NAME/KEY: misc_feature
- 275 <222> LOCATION: (391)..(391)
- 276 <223> OTHER INFORMATION: n is a, c, g, or t
- 278 <220> FEATURE:
- 279 <221> NAME/KEY: misc feature
- 280 <222> LOCATION: (395)..(395)
- 281 <223> OTHER INFORMATION: n is a, c, g, or t
- 283 <220> FEATURE:
- 284 <221> NAME/KEY: misc_feature
- 285 <222> LOCATION: (400)..(400)
- 286 <223> OTHER INFORMATION: n is a, c, q, or t
- 288 <220> FEATURE:
- 289 <221> NAME/KEY: misc feature
- 290 <222> LOCATION: (412)..(413)
- 291 <223> OTHER INFORMATION: n is a, c, g, or t
- 293 <220> FEATURE:
- 294 <221> NAME/KEY: misc feature
- 295 <222> LOCATION: (422)..(422)
- 296 <223> OTHER INFORMATION: n is a, c, g, or t
- 298 <220> FEATURE:
- 299 <221> NAME/KEY: misc feature
- 300 <222> LOCATION: (424)..(424)
- 301 <223> OTHER INFORMATION: n is a, c, g, or t
- 303 <220> FEATURE:
- 304 <221> NAME/KEY: misc feature
- 305 <222> LOCATION: (426)..(426)

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/02/2004
PATENT APPLICATION: US/10/812,737 TIME: 11:25:11

Input Set : A:\PTO.LM.TXT

Output Set: N:\CRF4\08022004\J812737.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:2; N Pos. 16,19,25,38,40,42,44,64,65,66,70,71,81,86,89,117,121,123,135
Seq#:2; N Pos. 143,177,179,181,193,194,209,210,215,217,221,228,233,236,243
Seq#:2; N Pos. 251,252,253,254,270,272,274,275,283,292,293,299,303,307,312
Seq#:2; N Pos. 319,324,325,328,329,342,345,366,377,382,391,395,400,412,413
Seq#:2; N Pos. 422,424,426,433,439,442,452,460,463,471,495,500,504,516
Seq#:5; N Pos. 13,14,16,20,21,25,26,27,28,42,52,55,57,59,63,65,68,72,74,77
Seq#:5; N Pos. 91,102,117,127,128,169,172,192,203,243,244,248,249,253,283
Seq#:5; N Pos. 288,299,318,327,334,348,359,360
Seq#:6; N Pos. 475,556,559,585,606,644,671,693,695,714,742,744,756,765,768
Seq#:6; N Pos. 808,815,823,830,837
Seg#:10; N Pos. 433,600,615,626,645,661
Seg#:14; N Pos. 6,15,37,38,47,56,57,94,127,155,157
Seq#:16; N Pos. 5,15,39,47,52,69,154,207,217
Seq#:17; N Pos. 18,19,27,47,66,76,82,108,133,162,210,260,276
Seq#:19; N Pos. 17,40,59,76,107,165,189,216,221,230
Seq#:21; N Pos. 17,23,28,36,41,44,53,59,62,67,70,71,74,76,79,83,84,86,97
Seq#:22; N Pos. 2,17,37,52,53,56,77,85,89,96
Seq#:23; N Pos. 17,19,27,28,29,37,38,46,49,65,72
Seq#:24; N Pos. 5,13,71,88,91,109,157,177,199,207,211
Seq#:26; N Pos. 299,333,353,410,411,460,474,479
Seq#:27; N Pos. 348,422,435,476,490
Seq#:28; N Pos. 18,47,59,74,138,174,176,211
Seq#:29; N Pos. 1,2,12,29,34
Seq#:30; N Pos. 3,4,5,6,8,13,15,20,27,32,33,40,49,50,57,63,67,69,76,78,87
Seq#:30; N Pos. 89
Seq#:31; N Pos. 12,26,46,49,55,60,63,69,70,73,79,92,96
Seq#:32; N Pos. 2,7,27,34,57,63,64,67,73,75,76,77,78,80,90,96,97,98
Seq#:33; N Pos. 5,12,28,32,38,44,57,68,76,82,92
Seq#:34; N Pos. 3,21,27,28,38,47,50,53,61,73,78,83,85,97
Seq#:35; N Pos. 21,22,28,32,65,67,68,70,77,83,92
Seq#:36; N Pos. 4,8,29,43,44,46,57,59,84,98,115,117,118
Seq#:37; N Pos. 7,10,53,61,65,66,72,74,75,89,94,100,107,126,141
Seq#:38; N Pos. 2,10,61,63,72,79
Seq#:39; N Pos. 5,7,8,10,15,16,20,24,71
Seq#:40; N Pos. 80,91
Seq#:42; N Pos. 14,31,36,63,73,93,98
Seq#:44; N Pos. 2,11,27,28,34,38,39,41,49,50,61,62,67,68,76,79,80,85,89,93
Seq#:45; N Pos. 8,24,33,34,47,48,58,63,68,71,73,77,88,95,96
Seq#:46; N Pos. 74
Seq#:47; N Pos. 7,8,17,23,33,42,47,48,52,55,60,62,66,70,71,74,84,86,87,96
Seq#:47; N Pos. 99,100
Seq#:48; N Pos. 5,6,33,35,36,42,46,48,55,59,69,81,87,91,94,97
Seq#:49; N Pos. 20,38,164,178,201,211,274,305,340,346,386,387,405,433,446
Seq#:50; N Pos. 5,6,13,18,22,39,45,48,54,65,70,72,80,83,90,94,96,98,102,104
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/02/2004 PATENT APPLICATION: US/10/812,737 TIME: 11:25:11

Input Set : A:\PTO.LM.TXT

```
Seq#:50; N Pos. 113,115,117,121,123,125,128,142,144,160,174,175,180,181,186
Seq#:50; N Pos. 192,198,205,215,223,224,233,234,238,243,253,257,268,280,291
Seq#:50; N Pos. 296,300,305,308,311,319,322,326,328,334,335,338,339,347,352
Seq#:50; N Pos. 358,361,367,382,389,395,410,413,414,418,425,436,443
Seq#:51; N Pos. 19,59,87,119,203,215,274,296,309,353,425,426,427,431,451
Seq#:51; N Pos. 470,472,478
Seq#:52; N Pos. 13,14,17,20,22,27,29,31,36,43,46,58,59,74,78,81,85,87,88,90
Seq#:52; N Pos. 91,92,95,96,105,107,109,115,116,117,120,123,148,154,155,156
Seq#:52; N Pos. 167,169,170,171,172,179,183,185,186,187,194,200,201,202,203
Seq#:52; N Pos. 205,235,236,242,244,246,247,250,303,305,318,327,331,335,336
Seq#:52; N Pos. 347,349,353,362,365,388,395,405,407,412,416,429,435,444,475
Seq#:52; N Pos. 481,485,488,505,506,507,525,528,532,534,535,543,551,552,553
Seq#:52; N Pos. 555,561,568,573,584,589,598,605,612,618,633,647,653,654,664
Seq#:52; N Pos. 679,689,695,698,711,720
Seg#:53; N Pos. 13,15,37,42,44,45,50,57,58,59,70,74,80
Seq#:55; N Pos. 5,32,40,60,62,76,107,155
Seg#:56; N Pos. 4
Seq#:69; N Pos. 356
Seq#:70; N Pos. 26
Seq#:71; N Pos. 5,19,29,38,42,45,49,61,77,79,88,90,100,110
Seq#:72; N Pos. 151
Seq#:73; N Pos. 7,16,233
Seq#:74; N Pos. 31,32,57
Seq#:76; N Pos. 11,35,37,38,43,56,67,71,75
Seq#:77; N Pos. 6,11
Seq#:78; N Pos. 11,20,24,31,38,53,61,62,66,83,84,92,109,115,146,153,166
Seq#:79; N Pos. 10,20,29,30,35,49,92
Seq#:80; N Pos. 9,88,98,105,107,127,142,147,161,166,167,171,180,196,206
Seq#:81; N Pos. 22,33,34,39
Seq#:82; N Pos. 13,16,33,46,47,78,82,83,121
Seq#:83; N Pos. 8,36
Seq#:84; N Pos. 30
Seq#:89; N Pos. 37,47,108,112,129,134,152,168,196,239
Seq#:91; N Pos. 326,338,339,344
Seq#:92; N Pos. 32,34
Seq#:94; N Pos. 5,25,38,39,44,46,59,66,70,74,80,82,83,84,86,90,91,92,112
Seq#:94; N Pos. 113,117,126,129,133,134,135,136,152,156,157,162,164,165,174
Seq#:94; N Pos. 178,181,185,186,187,190,191,194,206,227,231,235,244,247,251
Seq#:94; N Pos. 255,258,260,261,263,270,273,274,275,276,285,287,291,292,302
Seq#:94; N Pos. 305,306,311,318,319,321,327,328,329,333,348,349,352,357,363
Seq#:94; N Pos. 366,367,369,371,376,377,385,390,398,401,405,420,429,437,440
Seq#:94; N Pos. 442,443,453,455,456,473,474,477,481,487,488,495,496,497,500
Seq#:94; N Pos. 502,506
Seq#:95; N Pos. 11,24,40,48,51,71,80,83,91,95,99,111,115,116,118,121,123
Seq\#:95; \ \mathbb{N} \ Pos. \ 124,126,129,131,133,135,148,153,170,173,175,177,192,195,196
Seq#:95; N Pos. 198,200,201,211,212,219,222,223,226,231,240,243,244,249,255
Seq#:95; N Pos. 269,280,283,289,293,311,324,326,341,348,350,354,355,367,383
Seq#:95; N Pos. 384,391,398,400
Seq#:96; N Pos. 171,622,628,642,661,668,694,709,710,735,751,752,763,778,782
```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/812,737

DATE: 08/02/2004 TIME: 11:25:11

Input Set : A:\PTO.LM.TXT

Output Set: N:\CRF4\08022004\J812737.raw

Seq#:96; N Pos. 786,788,798

Seq#:98; N Pos. 17
Seq#:99; N Pos. 8,361

Seq#:100; N Pos. 8,39,50,56,71,72,97,110,177

Seq#:101; N Pos. 121

DATE: 08/02/2004 PATENT APPLICATION: US/10/812,737 TIME: 11:25:11

Input Set : A:\PTO.LM.TXT

```
L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:60
L:368 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:120
L:370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:180
L:372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:240
L:374 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:300
L:376 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:360
L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:420
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:480
L:588 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:590 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:60
L:592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:120
L:594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:180
L:596 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:240
L:598 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:300
L:724 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:420 L:728 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:540
L:730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:600
L:732 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:660
L:734 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:720
L:736 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:780
L:833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:420
L:837 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:540
L:839 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:600 L:841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:660
L:941 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:943 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:60
L:945 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:120
L:1023 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:1025 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:60
L:1027 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:120 L:1029 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:180
L:1099 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:1101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:60
L:1103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:120
L:1105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:180
L:1107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:240
L:1190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:1192 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:60
L:1194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:120
L:1196 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:180
L:1308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:1310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:60
L:1365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:1367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:60 L:1417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
```

PATENT APPLICATION: US/10/812,737 TIME: 11:25:11

DATE: 08/02/2004

Input Set : A:\PTO.LM.TXT

```
L:1419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:60
L:1484 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:1486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:60
L:1488 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:120 L:1490 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:180
L:1562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:240
L:1564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:300
L:1566 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:360
L:1568 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:420
L:1615 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:300
L:1619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:420 L:1621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:480
L:1671 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:1673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:60
L:1675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:120
L:1677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:180
L:1707 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:1804 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:1806 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:60
L:1876 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
L:1878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:60
L:1948 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:1950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:60
L:2015 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:2017 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:60
L:2092 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
L:2094\ M:341\ W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:60
L:2149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
L:2151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:60
L:2216 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0
L:2218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:60
L:2295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:2297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:60
L:2299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:120
L:2339 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
L:2341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:60
L:2386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:2388 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:60
L:2410 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:60
L:2474 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:2476 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:60
L:2571 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0
L:2573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:60
L:2643 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0
L:2645 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:60
L:2662 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:60
L:2757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
L:2759 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:60
L:2839 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
```

DATE: 08/02/2004 PATENT APPLICATION: US/10/812,737 TIME: 11:25:11

Input Set : A:\PTO.LM.TXT

```
L:2841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:60
L:2921 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:2925 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:120
L:2927 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:180 L:2929 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:240
L:2931 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:300
L:2933 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:360
L:2935 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:420
L:3295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
L:3297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:60
L:3299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:120 L:3301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:180
L:3303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:240
L:3305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:300
L:3307 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:360
L:3309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:420
L:3399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0
L:3401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:60
L:3405 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:180
L:3407 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:240
L:3409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:300
L:3413 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:420
L:3877 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0
L:3879 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:60
L:3881 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:120
L:3883 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:180
L:3885 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:240
L:3887 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:300
L:3889 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:360
L:3891 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:420
L:3893 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:480
L:3895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:540
L:3897 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:600
L:3899 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:660
L:3961 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0
L:3963 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:60
L:4038 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0
L:4040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:60
L:4042 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:120
L:4057 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0
L:4316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:300 L:4333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:0
L:4429 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0
L:4431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:60
L:4452 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:120
L:4487 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:0
L:4493 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:180
L:4523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:0
L:4594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:0
```

DATE: 08/02/2004

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/812,737 TIME: 11:25:11

Input Set : A:\PTO.LM.TXT

```
L:4596 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:60
L:4626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77 after pos.:0
L:4719\ M:341\ W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:0
L:4721 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:60 L:4723 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:120
L:4771 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:0
L:4773 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:60
L:4855 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:0
L:4857 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:60
L:4859 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:120
L:4861 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:180 L:4886 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0
L:4945 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:0
L:4947 \ M:341 \ W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:60
L:4949 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:120
L:4979 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:0
L:4998 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:0
L:5144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:0
L:5146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:60
L\!:\!5148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:120
L:5150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:180
L:5204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91 after pos.:300
L:5226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92 after pos.:0
L:5648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:0
L:5650 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:60
L:5652 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:120
L:5654 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:180
L:5656 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:240
L\!:\!5658 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:300
L:5660 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:360
L:5662 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:420
L:5664 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:480
L:5959 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:0
L:5961 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:60
L:5963 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:120
L:5965 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:180
L:5967 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:240
L:5969 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:300
L:5971 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:360
L:6065 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:120
L:6081 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:600
L:6083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:660
L:6085 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:720
L:6087 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:780
L:6121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98 after pos.:0
L:6143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:0
L:6155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:360 L:6209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:0
L:6211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:60
```

DATE: 08/02/2004 PATENT APPLICATION: US/10/812,737 TIME: 11:25:11

Input Set : A:\PTO.LM.TXT

Output Set: N:\CRF4\08022004\J812737.raw

L:6213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:120 $L\!:\!6240$ M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:120